

IN THE CLAIMS

1. **(currently amended)** A system providing low bit-rate compression of data comprising speech and music components for transmission, over a network, said system comprising:

a. a speech encoder encoding said speech component via a first encoding algorithm; ~~transforming said encoded speech signal into a format suitable for transmission, and embedding synchronization information associated with said speech component and encapsulating said encoded speech component along with synchronization information into a speech packet suitable for transmission over a packet network;~~

b. a music encoder encoding said music component via a second encoding algorithm, said second encoding algorithm different from said first encoding algorithm; ~~transforming said encoded music signal into a format suitable for transmission; and embedding synchronization information associated with said music component, and encapsulating said encoded music component along with synchronization information into a music packet suitable for transmission over the packet network; and~~

~~—— c. a multiplexer multiplexing said outputs of said speech encoder and said music encoder for transmission over said network,~~

wherein said first and second encoding algorithms are chosen to allow for low bit-rate compression of speech and music respectively.

2. (original) A system as per claim 1, wherein said data is a composite of said speech and music components and said system further comprises a signal separator, said signal separator separating said speech and music components from said composite.

3. **(currently amended)** A system as per claim 1, wherein said data further comprises a text component, a video component, and a graphics component, said system further comprising:

a text formatter transforming said text component into a format suitable for transmission and embedding synchronization information associated with said text component;

a video encoder encoding said video component via a third encoding algorithm, said third encoding algorithm different from said first and second encoding algorithms; transforming said encoded video signal into a format suitable for transmission; and embedding synchronization information associated with said video component; and

a graphics encoder encoding said graphics component via a fourth encoding algorithm, said fourth encoding algorithm different from said first, second, and third encoding algorithms; transforming said encoded graphics into a format suitable for transmission; and embedding synchronization information associated with said graphics component; ~~and~~

~~—— said multiplexer in (c) additionally multiplexing the output of said text formatter, said video encoder, and graphics encoder.~~

4. (original) A system as per claim 3, wherein said text component corresponds to subtitles associated with said video components.

5. (original) A system as per claim 1, wherein audio volumes associated with said speech component and said music component are modifiable relative to each other.

6. (original) A system as per claim 1, wherein said speech encoder is a LPC, MELP, CELP, or waveform interpolation encoder.
7. (original) A system as per claim 1, wherein said speech encoder is used in conjunction with a speech-to-text converter, and said speech-to-text converter converting said speech component to a text component; and said speech encoder encoding said text components and formatting said encoded text into a format suitable for transmission.
8. (original) A system as per claim 1, wherein said embedded synchronization information is any of the following: timestamps, synchronization labels, media synchronization tags, synchronizing tokens, or wait-on-event commands.
9. (original) A system as per claim 1, wherein said music encoder is a MDI-encoder or linear musical score notation.
10. (original) A system as per claim 1, wherein said music encoder is a transform-based encoder.
11. (original) A system as per claim 1, wherein said network is any of the following: local area network, wide area network, the Internet, cellular network, storage network, or wireless network.
12. **(currently amended)** A system providing low bit-rate compression of audio comprising speech and music components ~~for transmission over a communication channel,~~ said system comprising:

- a. a first analog-to-digital converter converting said speech component into a digital speech signal;
- b. a speech encoder encoding said digital speech signal via a first encoding algorithm;
- c. a speech audio formatter ~~transforming said encoded speech signal into a format suitable for transmission and embedding synchronization information associated with said speech component~~encapsulating said encoded speech signal along with synchronization information into a speech packet suitable for transmission over a packet network;
- d. a second analog-to-digital converter converting said music component into a digital music signal;
- e. a music encoder encoding said digital music signal via a second encoding algorithm, said second encoding algorithm different from said first encoding algorithm; and
- f. a music audio formatter ~~transforming said encoded music signal into a format suitable for transmission and embedding synchronization information associated with said music component~~encapsulating said encoded music signal along with synchronization information into a music packet suitable for transmission over the packet network; and
- ~~g. a multiplexer multiplexing said outputs of said speech audio formatter and said music audio formatter for transmission over said channel.~~

13. (original) A system as per claim 12, wherein said speech encoder is a LPC, MELP, CELP or waveform interpolation encoder.

14. (original) A system as per claim 12, wherein said music encoder is a MDI-encoder or linear musical score notation.

15. (original) A system as per claim 12, wherein said embedded synchronization information is any of the following: timestamps, synchronization labels, media synchronization tags, synchronizing tokens, or wait-on-event commands.

16. (original) A system as per claim 12, wherein said music encoder is a transform-based encoder.

17. **(currently amended)** A method to encode audio ~~for transmission over a communication channel~~, said audio comprising speech and music components, said method comprising:

- a. converting said speech component into a digital speech signal;
- b. encoding said digital speech signal via a first encoding algorithm;
- c. ~~transforming said encoded speech signal into a format suitable for transmission and embedding synchronization information associated with said speech component~~encapsulating said encoded speech signal along with synchronization information into a speech packet suitable for transmission over a packet network;
- d. converting said music component into a digital music signal;
- e. encoding said digital music signal via a second encoding algorithm, said second encoding algorithm different from said first encoding algorithm; and
- f. ~~transforming said encoded music signal into a format suitable for transmission and embedding synchronization information associated with said music component~~encapsulating said encoded music signal along with synchronization information into a music packet suitable for transmission over the packet network; and
- ~~g. multiplexing said outputs of steps (c) and (f) for transmission over said channel.~~

18. (original) A method as per claim 17, wherein said embedded synchronization information is any of the following: timestamps, synchronization labels, media synchronization tags, synchronizing tokens, or wait-on-event commands.

19. – 23. **(canceled)**